

CLAIMS

1. A computing system, comprising:

a server rack defining card slot locations to receive electronic cards and to align the electronic cards into electronic communication with a back plane;

one or more servers located on corresponding ones of the electronic cards and physically interacting with corresponding ones of the slot locations, each said server being coupled to the back plane to receive user command data, being programmed to process the user command data according to application programs operating on said server, and producing a video response resulting from said process of the command data according to the application programs;

a digital switch in the server rack, including a server port to communicate with the back plane and a wireless port to receive keyboard input information, said digital switch communicating via the back plane the keyboard input information as the user command data directed to a selected server and receiving via the back plane an analog signal identifying the video response from the selected server; the digital switch also including a code device to digitize and encode the analog signal into essentially lossless digital computer video information identifying the video response; and

a management station communicating via a wireless access point to the wireless port of the digital switch, said management station creating via user inputs the keyboard input information and communicating said keyboard input information to the digital switch.

2. A computing system according to claim 1, wherein the management station is a laptop computer.

3. A computing system according to claim 1, wherein the wireless port and wireless access point operate according to an 802.11 wireless communication standard.

4. A computing system according to claim 1, wherein the wireless port and wireless access point operate according to an ultra wideband wireless communication standard.

5. A computing system according to claim 1, wherein the video encoding includes a combination of run-length encoding and binary bit-coordinated encoding of two-color pixel strings.

6. A server rack, comprising:

a plurality of server cards each comprising a general processing code device, a memory device containing at least one application program, and a video processing code device, and a server card radio device, each said server card having a unique identifier associated with its server card radio device to distinguish its server card radio device from the radio devices of each other server card in the server rack, said server cards receiving keyboard input information, inputting the keyboard input information to the general processing code device, employing the application program in response to the keyboard input information, and producing in the video processing code device an encoded digital video signal in response to at least the application program; and

a digital switch comprising a digital switch radio device in radio communication with said server card radio devices to communicate the keyboard input information to selected ones of the server card radio devices and to receive the encoded digital video signal from the selected ones of the server card radio devices, said digital switch comprising a radio manager to channel communications between the digital switch and the selected ones of the server card radio devices using the unique identifiers.

7. A server rack according to claim 6, wherein one or more members of a group consisting of the general processing code device, the video processing code device, and the server card radio device are physically located on a common integrated circuit.

8. A server rack according to claim 6, wherein the server card radio devices and the digital switch radio device operate according to an 802.11 wireless communication standard.

9. A server rack according to claim 6, wherein the server card radio devices and the digital switch radio device operate according to an ultra wideband wireless communication standard.

10. A computing system according to claim 6, wherein the video processing code device producing the encoded digital video signal video includes an encoding routine employing a combination of run-length encoding and binary bit-coordinated encoding of two-color pixel strings.

11. A server rack according to claim 6, wherein the radio manager channels communications between the digital switch and the selected ones of the server card radio devices by directed selected ones of said communications identified by the unique identifiers to pre-established wireless communication channels.

12. A system, comprising:

a plurality of servers in a common rack, each comprising a code device, an application program responsive to user inputs to produce computer video, and a server radio having a unique channeling identifier relative to the other servers in the common rack;

a digital switch comprising a digital switch radio device in radio communication with said server radios to communicate a given user input signal to a selected one of the server radios and to receive from the selected one of the server radios an encoded digital video signal, said digital

switch comprising a radio manager to channel communications between the digital switch and the selected ones of the server card radio devices using the unique identifiers;

a workstation wireless access point communicating with a user workstation providing the user input signals, said wireless access point including an access point radio communicating with a network in communication with the digital switch.

13. A system according to claim 12, further including a private wireless network manager receiving the user input signals from the network via a wireless communication, wherein the digital switch radio device communicates the encoded digital video signal to the network via wireless communication for further communication to the user workstation.

14. A system according to claim 12, wherein the digital switch further includes a channeling interface to channel corresponding user input signals wirelessly to corresponding ones of the servers in accordance with a wireless communication protocol.

15. A system according to claim 12, wherein the digital switch further includes a channeling interface to channel corresponding encoded video signals wirelessly from corresponding ones of the servers to the digital switch.

16. A system according to claim 12, wherein the radio communication between the digital switch radio device and said server radios is attenuated to limit receptive range to less than 10 meters.

17. A system according to claim 12, wherein the radio communication between the digital switch radio device and said server radios operate according to an ultra wideband wireless communication standard.

18. A system according to claim 12, wherein the common rack further includes an RF shield exterior of the plurality of the servers and exterior of the digital switch.

19. A system according to claim 12, wherein the digital switch includes a video decoding engine to create a decoded video signal from the encoded video signal.